contentious legal proceedings to enforce their contractual and statutory rights to obtain necessary inputs from the incumbent." Mich. Order ¶ 204. Reporting alone might show, for example, that BellSouth provides loops to MCI in an average of ten days even if it offers a "target" of two days. At that point, MCI might file a lawsuit, or a complaint with the LPSC. Months or years later, the complaint would be decided. From BellSouth's perspective, the possibility of an uncertain monetary penalty months or years after MCI has lost customers and/or its good reputation will be a small cost of doing business. As BellSouth is acutely aware, only performance standards backed up by substantial, self-executing remedies have any prospect of deterring BOCs from providing poor service to their CLEC dependents. Yet nowhere in BellSouth's testimony, interconnection agreements, or SGAT does BellSouth even commit to the principle of performance standards with self-executing enforcement mechanisms.

To the contrary, in a filing with the LPSC the day after submitting the instant application,
BellSouth vehemently opposed MCI's call for the LPSC to establish self-executing enforcement
mechanisms, arguing that the LPSC's existing rules are adequate. BellSouth's Comments, LPSC

Perform. Docket, at 27-29. This claim is ludicrous. In a post-entry environment when MCI may well
have monthly or weekly complaints about receiving inadequate service from BellSouth, constant resort to
a formal, drawn-out state complaint procedure with uncertain remedies is far too costly for CLECs and
completely ineffective to modify BellSouth's behavior.^{27/}

Under BellSouth's proposed procedures, ²⁸ the following would be required when a performance dispute arises:

- (1) BellSouth and the CLEC must assemble a Joint Investigative Team;
- (2) the team must conduct an analysis to determine the problem;

The Texas PUC recognized as much in recently deciding to consider monetary penalties that must "be set at a level sufficient to discipline non-compliance and to insure self-enforcement." Texas PUC Order at 12 (ex. N).

^{28/} BellSouth's Comments, LPSC Perform. Docket, at p. 28.

- (3) the team must develop a plan for remedying the problem;
- (4) if the dispute cannot be resolved between BellSouth and the CLEC -- a likely scenario -- then the CLEC must file a formal complaint with the LPSC for mediation;
- (5) the CLEC may wait for over two weeks for the mediator's ruling;
- (6) if still unsatisfied, the CLEC is forced to file a formal complaint with the LPSC;
- (7) the CLEC's complaint must be published in the Official Bulletin for a period of up to 25 days. See Rules of Practice and Procedure of the LPSC, Rule 19. Further, the CLEC may wait for a period of up to two weeks for the complaint to be published in the Official Bulletin in the first place;
- (8) after publication, the complaint is transferred to the Administrative Law Division (id. Rule 59);
- (9) the administrative law judge ("ALJ") then notices and holds a status conference;
- (10) depending on the scope of discovery needed, a hearing may be set months away;
- (11) after the hearing is conducted, the ALJ files a proposed recommendation (id. Rule 56);
- (12) after issuance of the proposed recommendation, the parties may file an exception to the proposed recommendation within fifteen days (id.);
- (13) if a party files an exception to the proposed recommendation, the opposing party may file a reply to the exception within fifteen days (id.);
- (14) the ALJ then eventually issues a final recommendation (with no time limit as to when the ALJ must issue the recommendation) (id.);
- (15) after the ALJ issues the final recommendation, it is presented to the LPSC for consideration at its monthly Open Session. Depending upon the time the final recommendation is issued, the parties may have to wait for another month for the LPSC's next Open Session.

BellSouth can thus rest comfortably that its 99% market share will remain intact if competing carriers must slog through this procedure each time BellSouth fails to provision a loop on time or engages in other discriminatory conduct.

In contrast, self-executing enforcement mechanisms would be automatically triggered by BellSouth's non-compliance with established performance standards, without resort to lengthy regulatory or judicial intervention. Remedies that are both self-executing and sufficiently severe will supply

BellSouth with the incentive to provide reasonable and nondiscriminatory service. Although the Commission need not specify precise performance standards or quantify suitable remedies as part of its section 271 analysis, it must examine the record to determine if BellSouth has committed to performance standards and a self-executing remedy mechanism sufficient to ensure reasonable and nondiscriminatory service to CLECs. As there is no such evidence in BellSouth's application, the application must be denied.

D. The Reporting BellSouth Offers Is Inadequate.

In addition to the fact that BellSouth fails to offer performance standards with self-executing remedies, the reporting it offers to provide in its testimony is inadequate even to produce the underlying data to determine whether it has met its obligation to provide interconnection, resale, and unbundled elements, including OSS, on reasonable, nondiscriminatory terms.^{29/} For example, because BellSouth has consistently caused service outages through botched ILNP cutovers, including premature cutovers, MCI has developed measures to report the frequency and severity of these cutover problems: MCI proposes that BellSouth report the average coordinated conversion interval greater than five minutes, the average service loss for premature cutovers, the average service loss for late cutovers, and the average length of time customers lose service for number portability conversions. BellSouth does not offer to report these measures. Nor does BellSouth offer to report its performance for the following critical functions: average resubmissions per order, average delivery date delay resulting from resubmission; percent completions without notice to MCI or with less than 24 hours notice; call abandonment rate; mean time to provide recorded usage records; and percent invoice accuracy.

In addition, by refusing to report properly disaggregated data, BellSouth defeats the entire purpose of performance reporting. If, for example, the average time to provision a POTS loop with no

^{29/} MCI addresses in part IV below the lack of parity and inadequate OSS evident from the performance data BellSouth submitted with its application. This section does not address the data, but instead addresses some of the deficiencies in the *types* of performance reports BellSouth offers to prepare in the future.

days, a report that lumps together these two disparate types of products will prevent CLECs and regulators from understanding BellSouth's level of performance on either product. Similarly, if rural installs average two days longer than urban installs, a report that is aggregated at the state level -- or worst, at the regional level -- will prevent CLECs from determining whether they have obtained parity of service at either urban or rural locations. This is why DOJ's independent expert has emphasized the importance of proper disaggregation -- by customer group (subdivided by geography and by class of service) and by product (subdivided by wholesale categories such as resale, UNE, loop only, UNE combination, facilities, and by specific products, such as POTS, ISDN, Centrex) -- in order for performance reports to have any meaning. See Friduss Aff. ¶¶ 31-33 (DOJ La. Eval., ex. 3).

Despite the clear need for disaggregated reports, BellSouth fails to provide proper disaggregation for, and therefore significantly limits or eliminates the utility of, the following measures (see Stacy Aff., ex. WNS-1): average OSS response interval (no breakdown by product, state or sub-state); percent flow through (no breakdown by product, state, ^{30/} or substate); reject interval (no sub-state breakdown); firm order confirmation timeliness (no sub-state breakdown); average jeopardy notice interval (limited product breakdown, no report of BellSouth's retail performance^{31/}); percent of orders given jeopardy notices (limited product breakdown, ^{32/} no report of BellSouth's retail performance); OSS interface availability (no product, state, sub-state, or CLEC-specific breakdown); mean time to deliver invoices (limited product, no state or sub-state breakdown); usage data delivery accuracy (no product, state or

^{30/} BellSouth claims to provide this report at the state level and by product, but does not in fact do so. See Stacy Aff., ex. WNS-3. Other deficiencies in BellSouth's reports are discussed in part IV, below, and in the accompanying declaration of Bryan Green (ex. B).

^{31/} Where BellSouth fails to report its retail performance, a determination of parity is impossible. This is particularly problematic in light of BellSouth's refusal to agree to binding, objective performance standards.

^{32/} For both average jeopardy notice interval and percentage of orders given jeopardy notice, BellSouth claims that it provides a break-out of UNE loops with LNP, but does not in fact do so. Stacy Aff., ex. WNS-3.

sub-state breakdown). The Commission should consider BellSouth's inadequate disaggregation as a failure to report a particular measure at all, since an aggregated average of two products, services or geographic areas is equivalent to receiving no data on the specific products, services, or areas.

Moreover, BellSouth's inadequate disaggregation is not, as it claims, in any way cured by its "data warehouse." The data warehouse consists of a mainframe "data dump" in an unusable format, preventing MCI from confirming which orders were processed, which state was involved, or which product. Henry Decl. ¶ 46. Moreover, because the database is updated constantly with raw data, it does not match the paper reports BellSouth provides, making it impossible to use the raw data for audit purposes. Id. Finally, BellSouth recently confirmed an additional fatal flaw in its data warehouse: it will not provide data on its own retail operations, making a parity determination impossible. Id. ¶ 47.

IV. BELLSOUTH CONTINUES TO FAIL TO OFFER NONDISCRIMINATORY OSS THAT IS OPERATIONALLY READY

OSS includes all of the systems, databases, personnel, and documentation needed to ensure that the BOC can satisfy customer needs. Mich. Order ¶¶ 134-35, 137. The Commission has recognized the vital importance of non-discriminatory OSS to meaningful competition. SC Order ¶ 82; Mich. Order ¶ 130. Indeed, the integral nature of OSS to local competition has been repeatedly proven through experience. When MCI attempted to resell significant amounts of PacBell service in California, for example, the manual nature and poor readiness of PacBell's OSS led to vast delays in the provision of service and substantial errors in the service that was provided. As a result, MCI eventually was forced to pull back significantly from the California market.

Because of the importance of OSS, this Commission has required a BOC to show that its OSS is non-discriminatory in terms of quality, accuracy, and timeliness for all three modes of competitive entry in order to meet the prerequisites of section 271. Mich. Order ¶¶ 133, 139, 159. OSS must be nondiscriminatory on its face, and it must also be operationally ready. Id. ¶ 136.

In order to provide OSS that is nondiscriminatory on its face, a BOC must provide automated

OSS processes to CLECs where it uses such processes for its retail customers. Mich. Order ¶ 137; SC Order ¶ 107. This is because reliance on manual processes leads to delays, errors, and increased costs, as such reliance did with PacBell, and as this Commission found that it did with both Ameritech and BellSouth. Mich. Order ¶¶ 173, 181, 183, 186, 188, 193; SC Order ¶¶ 107, 118-20, 131. The BOC must also provide access to specifications and internal business rules. Mich. Order ¶ 137.

In order to provide OSS that is operationally ready, a BOC must provide OSS that will work as advertised. Generally, commercial usage is required, because successful commercial usage is by far the most probative evidence of operational readiness. Id. ¶ 138. Because no test process can capture all of the complexities of operating in a commercial environment, testing is generally insufficient to show that an interface will work as advertised. Indeed, a well-designed test process must generally be combined with a significant period of commercial use to iron out the frequently significant kinks in an interface and enable it to operate as it was intended. As the Commission found, Ameritech's OSS was not ready despite over a year of testing with CLECs and several months of commercial use. Indeed, many of the problems with Ameritech's OSS did not become apparent until commercial use began. Similarly, BellSouth's OSS was not ready despite BellSouth's proclamations of readiness based largely on test results.

As a result, the Commission has indicated that it is generally unwilling to allow CLECs to rely solely on testing as evidence of operational readiness. The Commission precluded Ameritech from relying solely on test evidence where other carriers "had sought to develop and test the OSS functions" in question prior to the filing of Ameritech's application. Id. ¶ 161. Only where other carriers have made the business decision not to develop and use the OSS functions in question can a BOC rely on test evidence without commercial usage to prove readiness. Id. ¶ 138.

To date, BellSouth stands alone among the BOCs in repeatedly filing federal section 271 applications before it has remedied functional OSS defects clearly identified by state and federal

regulators. Because BellSouth desires to gain entry into in-region long distance, BellSouth has worked to improve its OSS since its last application; the section 271 process is working at least to some extent to effect change. But that change is far from complete. BellSouth has not even corrected some of the specific deficiencies previously discussed by the Commission. These deficiencies include BellSouth's failure to provide an automated process to transmit service jeopardies, failure to provide due dates at parity, and failure to provide an acceptable machine-to-machine pre-ordering interface. BellSouth has also failed to correct many of the deficiencies in its OSS previously described by state commissions as well as other important deficiencies repeatedly identified to it by CLECs. These include failure to provide a process of loss notification for UNE customers, failure to provide an automated means of ordering local number portability (LNP) or transmitting rejects and jeopardies on LNP orders, and failure to provide CLECs a means of calculating due dates at the pre-order stage. The Commission has been given no choice but to find again that BellSouth's OSS contains functional deficiencies that prevent it from providing service at parity.

This Commission also has twice found BellSouth's OSS to be far from operationally ready. BellSouth again fails to show that its OSS is operationally ready. BellSouth fails, for example, to show that CLECs are successfully using BellSouth's EDI ordering interface commercially. And BellSouth fails to present even a single piece of evidence of any sort showing that CLECs can successfully transmit UNE orders across its EDI ordering interface. This Commission should not eliminate BellSouth's incentive to truly provide reasonable, nondiscriminatory OSS by prematurely granting BellSouth entry into in-region long distance.

Indeed, as recently as June, the Georgia Commission ordered BellSouth to correct a host of OSS deficiencies, most of which remain outstanding. Among these are BellSouth's failure to enable CLECs to access orders placed through EDI to check the status of those orders, failure to provide CLECs an automated means of calculating due dates at the pre-ordering stage, and failure to provide CLECs an adequate machine-to-machine pre-ordering interface. Green Decl. att. 4 (Georgia PSC, Order Adopting OSS Report, Docket No. 8354-U (filed June 4, 1998) ("Ga. OSS Order")).

A. BellSouth's OSS Contains Significant Functional Deficiencies.

BellSouth's OSS is discriminatory on its face. For several vital OSS functions, BellSouth lacks an automated method of transmitting information, or, in some cases, lacks any method at all. These functions include: service based jeopardy notifications, loss notifications for UNE customers, ordering unbundled elements when the order consists of a "partial migration" of some of the customer's lines, and ordering unbundled elements when local number portability is included as part of the order.

In addition, BellSouth's OSS contains other significant functional deficiencies. BellSouth continues to enjoy a greater ability to provide accurate due dates to its retail customers than CLECs can provide to their customers -- a problem caused in part by BellSouth's reliance on manual processing. In addition, BellSouth is simply unwilling to adopt a reasonable process of version control. Each of these functional deficiencies precludes CLECs from obtaining access to OSS on reasonable, nondiscriminatory terms.

1. BellSouth's Manual Return of Service Jeopardies is Discriminatory

One of the primary reasons that the Commission rejected BellSouth's prior section 271 applications was the absence of an automated process to provide service jeopardy notifications. BellSouth still lacks such a process.

Jeopardy notifications inform the CLEC that a BOC will not turn up a customer's service on the date that the BOC has promised. "It is critical that a BOC provide a competing carrier timely notice if the BOC, for any reason, can no longer meet the scheduled due date, so that the competing carrier can inform the customer of the delay before it occurs and reschedule the time for service installation." La. Order ¶ 39. In addition, unless the CLEC receives a jeopardy notification, when a customer calls the CLEC to complain, the CLEC will be unable to explain to the customer why the customer's service has not been turned up. Decl. of Bryan Green ¶ 117. (ex. B). "If the competing carrier is never informed by

[the BOC] of changes to the due date, the customer will likely blame the competing carrier for the failure to install service on time, even if the competing carrier is completely without fault." SC Order ¶ 115.

BellSouth intends to notify CLECs of service jeopardies, i.e., jeopardies caused when BellSouth learns that it lacks the facilities or manpower to turn service up on the promised date, via either a fax or a phone call. Green Decl. ¶¶ 121-23. BellSouth continues to offer this inferior manual service even though this Commission described the need for an automated process in rejecting BellSouth's previous applications. Id. ¶ 118.

The manual return of service jeopardy notifications is almost certain to significantly delay the return of jeopardies in many cases past the date when the customer's service was supposed to have been turned up. This is discriminatory. BellSouth has submitted some relatively unhelpful data on how long it takes to return (or how often it returns) jeopardies to CLECs. Id. ¶ 122.³⁴ But BellSouth has not submitted any data on how long it takes to return jeopardies in its retail operations. Id.³⁵ But, even if it were not BellSouth's burden of proof -- which it is -- to show parity in return of jeopardies, it is certain that BellSouth's return of jeopardies in its retail operation is faster than its return of jeopardies to CLECs. In its retail operation, BellSouth returns jeopardies in an automated fashion to its customer service

BellSouth's data show that on average, for those jeopardies it does return, it does so more than 100 hours in advance of the originally scheduled due date for residential resale and 71 hours in advance for business resale. (Stacy Performance Measures Aff., ex. WNS-3). But these numbers are simply not credible. In very few instances would a CLEC request a due date for residential resale that is more than 100 hours from submission of the order, so it would often be impossible for BellSouth to provide a jeopardy more than 100 hours before the due date. Green Decl. ¶¶ 113, 122 n.19. Moreover, even if BellSouth's numbers are accurate, it is hard to assess what they mean. BellSouth's numbers do not appear to include instances in which BellSouth should have returned a jeopardy but failed to do so entirely. Id. Conversely, BellSouth's numbers do appear to include orders placed through LENS even though the jeopardy process for such orders, which involves posting the status of an order in LENS, is entirely different than for EDI. Id.

^{35/} BellSouth claims that "[t]here is no equivalent BST analog for Average Jeopardy & Percent Orders Given Jeopardy Notices." Stacy Perf. Measures Aff., ex. WNS-1, at 14. But elsewhere BellSouth acknowledges that it does provide notices to its employees that orders are in jeopardy which then enable them to call their customers. Green Decl. ¶ 122. There is absolutely no reason that these jeopardies cannot be measured.

representatives who then call the customers. Id. ¶¶ 122-23. For CLECs, BellSouth also returns the jeopardies to its customer service representatives in an automated fashion, but these representatives must then call (or fax) the CLECs, who then must in turn call their customers. Id. In other words, one phone call is required to notify a BellSouth customer, while two phone calls are required to notify a CLEC customer. Id. This is not parity.

2. BellSouth's Manual Return of Loss Notifications Is Discriminatory

Loss notifications are used to inform CLECs that one of their customers has switched to another carrier. If, for example, an MCI local customer switches back to BellSouth, a loss notification is the only way that MCI will receive notice of the change. Green Decl. ¶¶ 131-33.

BellSouth states that it provides loss notifications via letters sent through the United States mail. Funderburg Aff. ¶ 143. But this is only true for customers with resold service identified by telephone number who switch all of their service away from a CLEC. (Indeed, in these instances BellSouth is providing MCI with loss notification via an electronic Network Data Mover process.) BellSouth does not provide any loss notification at all for customers served by UNEs, for customers with services identified by circuit ID (e.g., data services) or trunk ID (e.g., Direct Inward Dialing), or for customers who switch only part of their service away from a CLEC. Green Decl. ¶ 132.

For all of these customers, BellSouth has no process to inform CLECs that their customer has switched to another carrier. As a result, CLECs are very likely to continue to bill these customers until the customer calls them to complain -- resulting in exactly the sort of double billing situation that troubled this Commission in Ameritech's Michigan filing. Id. ¶ 133; Mich. Order ¶ 203. 36/

^{36/} In addition, because CLECs will not know that they have lost these customers, they will not know to attempt to win them back. Green Decl. ¶ 134. In contrast, BellSouth will be able immediately to attempt to win back its customers who switch to a CLEC, because BellSouth, as the carrier that actually makes the switch, will instantly receive the equivalent of a loss notification. Indeed, BellSouth has indicated its intention to send win-back letters immediately after a customer switches to a CLEC.

BellSouth has known about the major gaps in its loss notification process since at least last fall.

Green Decl. ¶ 132. Nonetheless, BellSouth has not fixed the process. As a result, its OSS remains facially discriminatory.

3. BellSouth Refuses to Maintain Multiple Versions of an Interface

BellSouth refuses to adopt a practice that is standard in the software industry – maintenance of more than one version of an interface simultaneously. When BellSouth implements a new version of an interface, it eliminates the prior version ninety days later. As a result, all CLECs must migrate to the new version within ninety days or be faced with a situation in which they can no longer use the automated interface they have put in place. Green Decl. ¶ 136.

A CLEC may be unable to commit the resources needed to develop the new interface and test it properly prior to the time by which BellSouth eliminates the old version. The CLEC may have focused its resources on more pressing needs or may simply lack the resources to make the change as rapidly as required. Id. ¶¶ 140-41. This should not cause the CLEC to lose its ability to use the interface it is already using.^{32/}

Moreover, some CLECs may not desire to migrate to a new version of an interface at all. CLECs should not have to spend significant resources developing and implementing a new version of an interface even if the benefits to them of migrating to that particular version are significantly outweighed by the costs. For example, the benefits of implementing the new interface may relate primarily to resale and the CLEC may place only UNE orders. Id. ¶ 140.

The CLECs are not arguing that BellSouth must continue to offer each version of an interface forever. Indeed, MCI, AT&T, Sprint, and LCI sent BellSouth a letter that requested only that BellSouth maintain two versions of an interface simultaneously (three versions in the ninety day period immediately after BellSouth implements a new version of an interface). Green Decl. att. 14. BellSouth

The change control process does not set any time frame for the implementation of a new version of an interface. The time frame is set by the agreement of a majority of CLECs. Green Decl. ¶ 141.

has proven unwilling to do so. Green Decl. ¶¶ 137-38. BellSouth's refusal is unreasonable -- in conflict with the common practice in the software industry and even with the practice of other BOCs. Id. ¶ 136. Bell Atlantic, for example, has agreed to a version control process very similar to the one proposed by the CLECs to BellSouth. Id.

4. BellSouth Fails to Provide Equivalent Access to Due Dates

Among the reasons that the Commission rejected BellSouth's previous section 271 applications was that BellSouth had a greater ability to provide accurate due dates to its customers at the pre-ordering stage than did CLECs. SC Order ¶ 167-69; La. Order ¶ 56-58. This was because there was a greater gap for CLECs than for BellSouth between the pre-ordering stage and the entry of an order into BellSouth's backend Service Order Control System ("SOCs"). That remains the case today. More CLEC orders than BellSouth orders fall out for manual processing (although BellSouth has made some improvement in this regard). Green Decl. ¶ 149-57. And it remains the case that BellSouth's version of EDI is a batch process, in which orders are transmitted from a CLEC to BellSouth at regular time intervals, rather than an event driven process, in which each order is transmitted as soon as it is entered into the CLECs' own systems. Id. ¶ 75, 148-49. The resultant delay in transmission of orders from CLECs to BellSouth inevitably delays entry of CLEC orders into BellSouth's backend systems; no such delay exists for BellSouth's retail orders.

The Commission suggested that BellSouth could ensure that CLECs and BellSouth had equivalent access to due dates by making appropriate changes either to its ordering or to its pre-ordering systems. La. Order ¶ 58. BellSouth has done neither.

5. BellSouth Provides No Means To Check the Status of Pending Orders

When a CLEC places orders via EDI, BellSouth -- at least in theory -- periodically notifies the CLEC of the status of the orders through FOCs, rejects, and completion notices. In between these events, the CLEC has no way of ascertaining the status of the orders. If, for example, a customer calls to

ask the status of his order, the CLEC cannot check. BellSouth, in contrast, is able to do so. Green Decl. ¶¶ 142-45.

6. BellSouth's Manual Ordering Processes Are Discriminatory

BellSouth's ordering processes also are insufficiently automated. BellSouth has not yet deployed automated processes for ordering local number portability, and even the processes BellSouth claims to be developing do not include the automated return of any rejects or jeopardies. BellSouth has failed to automate ordering of "split accounts" for UNE customers. BellSouth has failed to automate ordering of complex directory listings. BellSouth has failed to automate ordering for all but four "complex" services. Moreover, even for POTS orders, BellSouth's own data show that it is not yet providing automation at parity.

BellSouth's data show that only 72% of CLEC orders flowed through in May 1998. Stacy OSS Aff. ¶ 121. In preceding months, flow through was even lower -- 63% in March and 59% in April. Although BellSouth does not break down the types of orders involved in its flow through analysis, they were most likely simple residential POTS orders. "Manual processing close to one-third of the resale orders placed over an electronic interface is . . . significant in light of the problems associated with manual processing." Mich. Order ¶ 174 n. 435. Moreover, the situation is worse for CLECs that place their orders via EDI. The May chart on flow through attached to William Stacy's performance measures affidavit shows that for those CLECs that place their orders primarily through EDI (CLECs 9, 11, 16, and 26), the flow through rate is far lower than the 72% average; all had flow through rates below the 72% average; most had flow through rates significantly below the average.

Although BellSouth claims that after adjusting its data for CLEC-caused errors the "adjusted flow-through" was approximately 82%, this data, based on BellSouth's highly dubious assessment of which errors were caused by CLECs, is hardly adequate to show sufficient flow through. <u>SC Order</u>

^{38/} These numbers are calculated from the charts attached to William Stacy's performance measures affidavit.

¶ 108; Green Decl. ¶¶ 158-59. Astonishingly, despite this Commission's previous explanation that BellSouth could not rely on an adjusted flow through analysis until it had provided "further evidence . . . as to the cause of the errors," it remains true that "BellSouth does not provide credible evidence or explanation to substantiate its conclusions regarding the causes of order errors." SC Order ¶ 108. Moreover, even if BellSouth's adjusted flow through figures were accepted, they would not show sufficient flow through. The Commission explained that a relevant benchmark for assessing flow through is the percentage of retail orders rejected by the BOC's back end systems for its own orders. Mich. Order ¶ 178. BellSouth acknowledges that its "retail residence flow through is approximately 96%" -- significantly greater even than the 82% adjusted CLEC flow through rate for May. Stacy OSS Aff. ¶ 121. 39/2 Adjusted flow through for CLECs was even lower in April and March -- 76.4% in April and 78.6% in March. Stacy Performance Measures Aff., ex. WNS-3.

The reason for the disparate flow through rates between CLECs and BellSouth retail customers is that BellSouth's claim to have automated POTS ordering for CLECs is misleading. Although BellSouth asserts that the "two primary conditions" causing manual handling are the presence of certain relatively rare types of errors on the order or the existence of a complex order, in reality, there are other important causes as well. Stacy OSS Aff. ¶ 133. When pressed, for example, BellSouth acknowledges that it has not automated POTS ordering for an important type of order -- split accounts, in which a customer decides to give a CLEC only some of its lines. Green Decl. att. 3 (Testimony of William Stacy, Hearings before the Tennessee Regulatory Authority, May 8, 1998 ["Stacy Tn. Test."], IV E, at 252). This is a very common type of order at the early stages of competition when a customer might want to experiment by ordering some of its lines from a CLEC but continuing to use BellSouth for its primary lines. Green

BellSouth's business flow through is approximately 83%, presumably because complex orders are processed manually, but this is not the relevant basis of comparison given that CLECs have submitted few complex orders. In any case, when combined with BellSouth's residential flow through rate, it is still far higher than the CLECs' flow-through rate. And BellSouth has not adjusted its own flow through rate based on errors of its service representatives! Green Decl. ¶ 158.

Decl. ¶ 160. In fact, Ameritech's failure to automate orders for split accounts was one reason for the Commission's rejection of its section 271 application for Michigan. Mich. Order ¶ 179. Given BellSouth's relatively low flow-through rate, there are almost certainly other important situations in which orders fall out for manual processing when they should not do so. BellSouth needs first to delineate these situations and then to eliminate them.

BellSouth's ordering processes with respect to unbundled elements are also insufficiently automated. Although BellSouth does claim that orders for a limited number of UNEs (2-wire analog loop, 2-wire analog port, interim local number portability, loop plus interim number portability) can be placed through EDI, BellSouth presents no data, even internal test data, to show that these orders do indeed flow through its systems without manual intervention. MCI's testing with BellSouth has revealed that BellSouth cannot now return an automated firm order confirmation or completion notice on an order for a simple unbundled loop. Green Decl. ¶¶ 100, 110. All digital loops and ports must be ordered manually. Id. ¶ 151. And all orders for fifteen or more loops fall out for manual processing. Id.

Even more important, BellSouth's ordering process for "split accounts" is even less automated with respect to UNEs than it is with respect to resale. While resale orders for split accounts fall out for manual processing after transmission via EDI, all UNE orders for split accounts must be transmitted manually -- as BellSouth informed MCI on July 30, 1998. Green Decl. ¶ 152. This eliminates the use of EDI on a type of order that MCI projects could amount to more than 50% of its orders. Id. It, therefore, entirely undermines BellSouth's claim that it provides reasonable, nondiscriminatory OSS.

Equally important, BellSouth has failed entirely to deploy automated processes for ordering permanent local number portability ("LNP"). Id. ¶ 152. BellSouth has told MCI that it expects to be able to accept EDI orders for LNP by around the time MCI begins ordering LNP in September. But at this point this is simply a future promise. If BellSouth fails to fulfill this "expectation," MCI will have to manually place the primary type of order it intends to place — loop with LNP. Id. ¶¶ 152-53.

MCI's development of EDI for UNEs will have been rendered almost completely useless. Even if BellSouth successfully implements a process for ordering LNP via EDI, MCI will still be receiving discriminatory service. This is because BellSouth does not plan to return any jeopardies or rejects on LNP orders (or orders for loops plus LNP) via EDI until some time next year. Id. ¶¶ 128-29. As explained above, the automated return of jeopardies is vital. The same is true for rejects, as this Commission made clear in rejecting BellSouth's South Carolina application. SC Order ¶ 120; Green Decl. ¶ 129.

BellSouth's EDI interface also does not include the ability to order complex directory listings, the type of listing desired by most business customers. ^{40/} Green Decl. ¶ 154. Indeed, because BellSouth does not allow part of an order to be placed manually and part via EDI, a migration order for a UNE customer who desires to change its complex directory listing must be placed entirely through manual processes.

Id. ¶¶ 154-55. The loop/LNP order, for example, as well as the directory listing order, must be placed manually.

BellSouth also acknowledges forthrightly that it has not designed its OSS to handle basic combinations such as loop plus port. Stacy OSS Aff. ¶ 102.41/2 And BellSouth certainly has not provided OSS to enable CLECs to order separate unbundled elements and combine them on their own. Green Decl. ¶ 156. Given the Commission's instruction that a BOC's OSS must support all modes of competitive entry, BellSouth's OSS is clearly deficient.

In addition to its failure sufficiently to automate ordering of UNEs and POTS resale, BellSouth has failed to automate ordering of all but four of what it misleadingly calls complex services (essentially

^{40/} To its credit, BellSouth recently agreed to process through EDI orders for migration of a customer's entire service when the customer wishes to maintain its existing complex directory listing as is. Green Decl. ¶ 154.

BellSouth must, at a minimum, provide those elements on a combined basis unless and until it provides reasonable and nondiscriminatory access to its network to permit CLECs to combine network elements.

all resold services other than POTS). Id. ¶¶ 161-63, 166; DOJ SC Eval. A22.

Although BellSouth claims that its use of account teams in complex orders provides parity, the involvement of BellSouth employees in orders for CLEC customers is certainly not equivalent to the involvement of BellSouth employees in orders for BellSouth's own customers. Green Decl. ¶¶ 164-65. BellSouth's ordering processes, therefore, continue to require far too much manual involvement to provide service at parity.

B. BellSouth's Operations Support Systems Do Not Work In Practice.

In addition to being deficient on their face, BellSouth's OSS do not work reliably in practice.

BellSouth's data are insufficient to demonstrate the operational readiness of its systems. Indeed,

BellSouth fails to present a single piece of evidence demonstrating that CLECs can successfully transmit

UNE orders over its EDI interface.

The Commission has stated that successful commercial usage is the most probative evidence of operational readiness. Mich. Order ¶ 138. It has indicated that a BOC can rely on less probative evidence only where CLECs have made the business decision not to use a particular interface. Id.

This is the correct standard to employ. As the Commission is well aware, the development of OSS interfaces is a lengthy and difficult process. Each stage of testing almost inevitably reveals deficiencies that must be corrected before an interface is ready for commercial use. Early stages of commercial use then generally reveal further deficiencies that must be corrected before an interface functions smoothly as it was intended -- as is apparent from each of the section 271 applications the Commission has considered to date. Green Decl. ¶ 26-28, 102, 106. This is because no test can account for the myriad ways in which an interface will be used in the real world.

BellSouth simply does not present evidence of successful commercial use of either its EDI or its electronic bonding interfaces that is sufficient for BellSouth to meet its burden of showing these interfaces are ready. BellSouth states that its EDI interface is in commercial use at least for resale. But

BellSouth does not present <u>any</u> evidence that the commercial usage that has occurred has been successful. <u>Id.</u> ¶ 111.

Given that BellSouth itself states that some CLECs are using its EDI interface for resale,
BellSouth cannot contend that its failure to present evidence of successful commercial use of EDI results
from a decision by CLECs not to use its EDI interface. It is BellSouth that chose not to present evidence
of whether this usage has been successful. As a result, BellSouth has not provided evidence sufficient to
establish that it is providing resale OSS at parity.

BellSouth's failure to establish that it is operationally ready is even clearer in the case of EDI for UNEs. As with resale, BellSouth presents no evidence of successful commercial usage of EDI for UNE ordering. In fact, there does not appear even to have been any commercial use of EDI for ordering UNEs. Id. ¶¶ 103-04.

BellSouth cannot contend that the absence of commercial usage is the result of any business decision by CLECs not to use EDI to transmit UNE orders. MCI, for one, has been diligently working with BellSouth to develop an EDI interface for UNEs. Id. ¶¶ 96-101, 105. It necessarily takes time for CLECs, working with BellSouth, to then develop their side of the EDI interface. It was only in March of this year, with the implementation of EDI 7.0, that BellSouth presented an industry standard interface for ordering UNEs. Id. ¶ 96.

MCI plans to begin passing commercial orders for unbundled elements via EDI in September. At that point, MCI will begin to acquire the evidence needed to make an accurate assessment of the readiness of BellSouth's interface. Id. ¶ 105. In BellSouth's application as submitted, however, there is simply no evidence of successful commercial usage upon which to base the conclusion that BellSouth's EDI interface is operationally ready to handle UNE orders. As a result, BellSouth's section 271 application must be rejected.

Even if this Commission were inclined to consider less probative evidence than successful

commercial usage as a means of evaluating operational readiness, however, BellSouth's evidence would be inadequate. Indeed, BellSouth presents no evidence even showing successful testing of OSS for UNE orders. BellSouth attempts to show that its EDI interface is operationally ready by presenting an analysis conducted by Ernst and Young. This analysis, however, relies on internal testing that did not include a single order for an unbundled element and did not include the provisioning of a single order of any sort. Id. ¶ 104. BellSouth also attempts to show operational readiness based on carrier to carrier testing it has engaged in with AT&T and MCI. But BellSouth presents little evidence of the results of those tests and no evidence of the results of any carrier to carrier testing for UNEs. Id. ¶ 105. This is not surprising, because MCI's tests show that BellSouth's EDI interface is not operationally ready to handle UNE orders. Id. ¶ 98-100, 110.

MCI has completed one stage of testing of UNE ordering with BellSouth and will soon enter the second and final phase. The testing revealed exactly the sorts of problems one would expect in an interface in early testing – not the sort of performance one would expect from an interface capable of smoothly functioning today in a commercial environment. Id. These problems included, for example, description of mandatory fields as optional, which would cause the rejection of orders, and an inability to return FOCs or completion notices on orders for unbundled loops. Id. BellSouth does not deny this.

Finally, BellSouth attempts to show the operational readiness of its EDI interface by presenting some general ordering data. But BellSouth's ordering data include orders placed through LENS and manual interfaces as well as through EDI. This data then cannot show the readiness of EDI. Id. ¶ 109. Moreover, in important ways, BellSouth's data on commercial orders shows that its OSS is not yet ready. On average, in May, it took BellSouth almost two days to return a FOC on mechanized resale residence

The testing also did not appear to evaluate the length of time BellSouth took to return FOCs, rejects, jeopardies, or completion notices, or the number of orders that fell out for manual processing. Moreover, Ernst and Young present little or no data by which the efficacy of the test can be judged along any dimension. Ernst and Young simply assert, without providing any data by which their assertion could be evaluated, that the test showed that BellSouth's EDI interface can process a certain number of orders in a certain amount of time.

orders, over two days on UNE orders (of which there appear to have been few), and three days on resale business orders. Stacy Perf. Measures Aff., ex. WNS-3. As with FOCs, it took BellSouth almost two days on average to return a reject on a mechanized resale residence order, and 2.6 days on a resale business order (there is no data on UNE loops with LNP reported). Id. It is clear that these time increments are far too long. Green Decl. ¶ 115 n.18. This is so even though BellSouth fails to present data on how long it takes to return the retail analog of a FOC or reject, id. ¶ 115 -- part of another general deficiency in BellSouth's claim of operational readiness. In addition to its failure to present data on the timeliness of return of the retail analogs of FOCs and rejects, BellSouth also fails to present data on how long it takes to return the retail analog of a jeopardy, data on the average installation interval for unbundled loops, and data on the timeliness of return of completion notices. Id. ¶¶ 114-15. This is all data that this Commission has deemed essential to demonstrate operational readiness. Mich. Order ¶ 112, 187 & n.479; SC Order ¶ 118. Yet BellSouth presents no other data sufficient to show the readiness of EDI. Thus, BellSouth simply has not shown that its EDI interface is operationally ready.

BellSouth's failure to present data showing the operational status of its EDI interface is mirrored by its failure to provide other essential data. BellSouth has presented no evidence of successful commercial usage of its electronic bonding interface for maintenance and repair or of its change management process. Green Decl. ¶¶ 174-75, 108 n.16. In both instances, this is because of BellSouth's late deployment of these processes. Id. In both instances, commercial usage can be expected very soon, but until such usage occurs, there is no way to determine that these processes will work effectively.

BellSouth has therefore failed to show that its systems work as advertised, and as required to serve CLECs on reasonable, nondiscriminatory terms. The fact that BellSouth has failed to present data showing that its systems work at present volumes of orders certainly demonstrates BellSouth's failure to show that its systems have sufficient capacity to work successfully "in a market that is otherwise fully open to competition." DOJ SC Eval. A30.

C. BellSouth's Lack of an Adequate Machine-to-Machine Interface for Pre-ordering is Discriminatory.

This Commission has twice concluded that BellSouth's OSS is deficient because it does not allow CLECs to integrate their OSS with BellSouth's pre-ordering interface. BellSouth claims to have fixed this problem by offerings CLECs "CGI" specifications that they can use to perform integration and by offering CLECs an EC-Lite machine-to-machine interface. Neither "solution" is an adequate one. CGI requires costly development to produce a slow and cumbersome interface that does not even provide access to interpretable customer service records. EC-Lite is a proprietary interface developed largely by AT&T that provides AT&T advantages over other CLECs, is costly and time consuming to develop, and that was rejected as an industry standard well before BellSouth began to implement it.

BellSouth's primary pre-ordering interface is LENS. As this Commission has recognized, LENS is fundamentally deficient. La. Order ¶ 50-52; see also Green Decl. ¶¶ 39-42. This Commission also found that BellSouth's offer of "HTML parsing" as a means of integration would not provide parity because "this method would require the competing carriers to proceed through each of the LENS presentation screens, just as a person using the system would." SC Order ¶ 162. BellSouth contends that it now offers alternatives to LENS that are acceptable. But this is not so.

BellSouth first points to its offer of CGI specifications that ostensibly allow the CLEC to integrate LENS with its own OSS. However, while this Commission distinguished HTML parsing from CGI, the version of CGI developed by BellSouth differs only slightly, if at all, from HTML parsing. Like HTML parsing, CGI requires an expensive development effort on the part of the CLEC that must be repeated each time BellSouth makes a significant change in the presentation of data in LENS. Green Decl. ¶¶ 46-47. And, like HTML parsing, it requires the extraction of data from LENS one screen at a time, because the manner in which a CLEC obtains the information is "the same in both the browser mode and the CGI mode of LENS." Stacy Tn. Test., IV. A, at 93; Green Decl. ¶¶ 44-45. Indeed, as BellSouth's affiant William Stacy explained at recent Tennessee hearings, the version of CGI developed

by BellSouth, in contrast to a version it chose not to develop, "uses the HTML language" and is closer to HTML parsing than to the type of CGI discussed by the FCC. Stacy Tn. Test., IV A, IV B, at 96.

Moreover, the updated specifications BellSouth has provided for CGI remain inadequate. MCI has been attempting for some time to use the CGI interface as an interim solution for the limited purpose of retrieving CSR information in a form that can be used to populate an order for service. MCI has been unable to do so. Green Decl. ¶¶ 49-50. BellSouth has refused to provide either a data dictionary or a design record layout that would enable MCI to "parse" the stream of CSR data it receives into a format that can be used to complete an order in EDI. Id. ¶ 50. Although BellSouth contends that a prototype CGI interface developed for it by Albion demonstrates that CGI can be made to work successfully, when MCI contacted Albion, Albion told MCI that it was impossible to use CGI to parse CSRs at a sufficient level of granularity to allow the information obtained to be populated in an order. Id. ¶¶ 51-52.

BellSouth's other pre-ordering alternative -- EC-Lite -- is equally inadequate. EC-Lite is a technology developed by AT&T that potentially provides significant advantages to AT&T as compared with other CLECs. It is also a technology that is very costly for CLECs to develop and maintain and that takes a long time to deploy. It is for just these reasons that the industry roundly rejected EC-Lite as a potential industry standard. Id. ¶ 55-57. BellSouth proceeded to develop such an interface well after it knew that such an interface would not become the industry standard. Id. ¶ 57-62.

At the same time, BellSouth has consistently refused to develop with MCI a pre-ordering interface based on EDI TCP/IP SSL3. Id. ¶ 38. This is so even though the ECIC Committee reached consensus in February 1997 that EDI TCP/IP SSL3 would be the interim standard, the industry agreed last October that it would develop EDI TCP/IP SSL3, as well as CORBA, as long term pre-ordering interfaces, and the industry released specifications for EDI TCP/IP in April. Indeed, the industry has now completed balloting on the EDI TCP/IP transport protocol and data elements. Id. ¶ 36. To date, however, BellSouth has not indicated that it is willing to move forward with EDI TCP/IP.

Adoption of industry standards is of vital importance. Not only do industry standards reflect the consensus of the industry as to what is best, but they also enable national carriers to focus development and training costs on a single interface. Id. ¶¶ 17-22. The Commission properly concluded that "the use of industry standards is the most appropriate solution to meet the needs of a competitive local exchange market." Mich. Order ¶ 217. And, for reasons already articulated, that view is clearly borne out here. Even aside from their proprietary nature, LENS, CGI, and EC-Lite all have overarching deficiencies that make them unacceptable as pre-ordering interfaces.

D. The Functionality Provided Through LENS is Discriminatory.

BellSouth's discriminatory provision of pre-ordering information extends beyond the fundamental deficiencies discussed above. BellSouth also chooses to discriminate in the information and functionality it makes available through LENS. The same deficiencies beset CGI, and, although MCI has no experience with EC-Lite, it appears from BellSouth's filing that almost all of these deficiencies beset that interface as well. Although individually some of these disparities may not appear great, their collective effect is to increase significantly the time required for a CLEC representative to interact with its customer and to decrease significantly the CLEC's efficiency.

The ways in which BellSouth discriminates are almost too numerous to catalog:

- A CLEC cannot use LENS to obtain due dates for any service that will be provided using unbundled elements. Green Decl. ¶ 77. A CLEC representative using LENS to calculate a due date for resale must review several items of information to manually calculate a due date. A BellSouth representative using BellSouth's residential pre-ordering system, RNS, receives a precalculated due date that is highlighted on-screen. Id. ¶ 78; DOJ SC Eval. A17-18; FPSC Order 82. ^{43/} The Commission recognized the "apparent lack of parity" in its South Carolina Order (¶ 172), and the Georgia Commission ordered BellSouth to "provide a full due date calculation capability in the pre-ordering mode of LENS" (Ga. OSS Order, App. A, at 4), but BellSouth has not done anything to create parity. Green Decl. ¶ 81.
- A CLEC must move repeatedly through a random list of available long distance companies to obtain the information necessary to implement a customer's choice of preferred interexchange

^{43/} A CLEC representative using LENS' "firm order" mode to obtain a due date must first enter ordering information and then proceed through each pre-ordering function sequentially even if the CLEC only intends to use one of these functions. Green Decl. ¶ 78 n.11.

carrier, an exercise which could require reviewing up to 30 different pages of information. Green Decl. ¶ 83; FPSC Order 82; Stacy, Tn. Test., IV.C, at 133-136, IV.E, at 225-226. A BellSouth representative can access a particular carrier's information simply by typing in the carrier's name. As with due date calculation, this Commission expressed its concern about this apparent lack of parity, and the Georgia Commission ordered BellSouth to end the lack of parity. SC Order ¶ 174; Ga. OSS Order, App. A, at 2. As with due date calculation, however, BellSouth has not yet fixed the problem. Green Decl. ¶ 83.

- A CLEC altogether lacks functionality to perform a "service inquiry" for complex orders. A CLEC has no automated means of determining whether facilities are available and thus no way of giving a potential customer a reasonable estimation of due date or even of total cost of the order (which can be affected by the absence of facilities). BellSouth, in contrast, can perform an automated service inquiry. Green Decl. ¶¶ 89-90.
- A CLEC using LENS does not have access to much of the Customer Service Record ("CSR") information available to BellSouth representatives. Green Decl. ¶¶ 67-68. For example, a CLEC can only print out the first 54 pages of each section of the CSR; there is no such limit on BellSouth. Id. ¶ 69; Stacy Tn. Test., IV.D, at 197-198; Ga. OSS Order, App. A, at 1. Also, the CSR available to a BellSouth representative contains non-proprietary pricing information on the services that a customer currently purchases from BellSouth, contains useful summary information on a customer's current services, and contains customer payment history information. Stacy Tn. Test., IV.A, at 49, 58-59, IV.D, at 198-201, V.A, at 30; Ga. OSS Order, at 10; FPSC Order 81. The CSR provided to CLECs contains none of this information. Green Decl. ¶ 67.
- A CLEC using LENS does not have the ability to obtain or assign the Direct Inward Dialing ("DID") numbers used by many business customers -- functions the industry's Ordering and Billing Forum has agreed are important and that the Georgia Commission has ordered BellSouth to provide. Green Decl. ¶ 87; Stacy Tn. Test., IV.D. at 211; Ga. OSS Order, App. A, at 2. A BellSouth business representative has no such limitation.
- A CLEC using LENS must proceed through each step in LENS' number reservation function in order to reserve a phone number. Green. Decl. ¶ 71. BellSouth representatives can simply accept a number pre-selected by the pre-ordering system. Id.; FPSC Order 82.
- A CLEC using LENS can only reserve a maximum of six telephone numbers at one time; a BellSouth representative is not subject to comparable limits. Green Decl. ¶ 70; FPSC Order 81; Ga. OSS Order, at 11.
- A CLEC reserving a phone number in LENS has no way to view, and hence no way to offer its customer, a choice of NXX codes. Green Decl. ¶ 72. A BellSouth representative can easily view such codes. Id.; FPSC Order 81. The Georgia Commission has ordered BellSouth to end this disparity. Ga. OSS Order, App. A, at 3. It has not yet done so. Green Decl. ¶ 72.
- A CLEC cannot access information regarding whether a particular address is located within a county or municipality for purposes of determining whether the customer will be subject to local taxes. Green Decl. ¶ 85. MCI believes that RNS and SONGS provide such information and use it to populate the order form. Id. ¶ 85.

- A CLEC using LENS cannot see what promotions BellSouth is offering. BellSouth representatives can see this information. Id. ¶ 86. This information is certainly relevant to MCI, which has a right to resell promotions.
- MCI has requested that BellSouth provide it with a download of the Regional Street Address Guide ("RSAG") database so that MCI can perform address validations without the necessity to use LENS. Id. ¶¶ 65-66. Despite the fact that such a download is required by MCI's Interconnection Agreement with BellSouth and has been ordered to be provided by the Georgia Commission, BellSouth has so far failed to provide the requested download. Stacy Tn. Test., IV D, at 190-94; Ga. OSS Order, App. A, at 1.

Thus, LENS is cumbersome to use, fails to provide functionality important to CLECs, and is inferior to BellSouth's own pre-ordering systems in innumerable ways. It does not meet the requirements of section 251(c)(3) and therefore item (ii) of the section 271 checklist.

V. BELLSOUTH IS NOT PROVIDING ADDITIONAL ITEMS ON THE COMPETITIVE CHECKLIST ON REASONABLE AND NONDISCRIMINATORY TERMS

In addition to substantial checklist deficiencies described above relating to unbundled network elements, OSS, pricing, and performance standards, BellSouth fails to meet the checklist in the following ways:

A. Customized Routing. BellSouth is obligated to provide customized routing of operator services calls because customized routing is a feature, function, or capability of the switch, and therefore a part of the switching network element. See 47 U.S.C. § 153(29) (defining "network element" to include all "features, functions, and capabilities that are provided" by means of "a facility or equipment used in the provision of telecommunications service"). MCI requires customized routing to have its customers' operator services calls routed to MCI's operator services platform. See Henry Decl. ¶ 51. BellSouth, however, is preventing this by refusing to pass CLECs' operator services traffic using Feature Group D ("FGD") signaling, which is what MCI and other CLECs use in their networks. See id. Instead, BellSouth uses modified operator signaling ("MOS"), which is incompatible with CLECs' provision of operator services. Id. Although it is technically feasible for BellSouth to translate MOS